William F. Kepler

FY 1999 - FY 2000

The state-of-the-art of Nondestructive Testing (NDT) has grown rapidly in the past few years. However, Reclamation is not taking advantage of these techniques in condition assessment. As Reclamation facilities continue to age, more efficient and reliable condition evaluation methods are needed. Problems with aging infrastructure were highlighted with the radial gate failure at Folsom Dam and the valve failure at Flaming Gorge Dam. To implement state-of-the-art NDT on Reclamation structures and to disseminate these techniques throughout Reclamation, this program performs small-scale, nondestructive evaluations on structures in the various Regions. The cost of each assessment is carried by both the research program and the receiving area office. The results of each evaluation and assessment are then reported to Reclamation in various agency publications. This will ensure that we are not only solving specific field problems but we are also educating the entire Bureau in the possibilities of NDT.

The objectives of this research program were to modify existing state-of-the-art NDT techniques so that they can be used on Reclamation structures and then to educate Reclamation on these techniques to expand the abilities of the entire organization.

At the mid-point of this program, we have successfully modified two NDT techniques so that they can be used by Reclamation. However, the key to this program is to disseminate this information as widely as possible throughout the organization. To this end, we have published two widely distributed publications and made presentations to over 150 Reclamation personnel.

This research could not have been done without the support of our partners: Eastern Colorado Area Office
Dam Safety Office

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